

**FRESNO, CALIFORNIA  
CLASS SPECIFICATION**

**FIRE PREVENTION ENGINEER**

**FLSA STATUS:**

Exempt

**CLASS SUMMARY:**

The Fire Prevention Engineer is the fifth level in a five level Fire Prevention series. Incumbents are responsible for performing technical and detail-oriented fire prevention activities requiring expertise in math, hydraulic calculations, plan review, research, analysis and interpretation of fire prevention codes, laws and standards. This position serves as the primary fire sprinkler plan reviewer for all buildings within the City.

The Fire Prevention Engineer is distinguished from the Supervising Fire Inspector by its responsibility for serving as the primary fire sprinkler plan reviewer for all buildings within the City.

**TYPICAL CLASS ESSENTIAL DUTIES:** (These duties are a representative sample; position assignments may vary.)

**FRE-  
QUENCY**

- |    |   |                |
|----|---|----------------|
| 1. | Reviews and approves fire sprinkler system plans, ensuring proper design for proposed building use, analyze available water supply, and ensure compliance with design criteria associated with the layout of piping and choice of system components.        | Daily<br>65%   |
| 2. | Consults with contractors, fire protection design engineers, architects, developers, and property owners regarding technical fire prevention issues.  | Daily<br>10%   |
| 3. | Provides technical direction and advice to Fire department staff including participating in field inspections.  | Daily<br>5%    |
| 4. | Provides training and direction on the review of fire sprinkler and fire hydrant systems for fire prevention staff; participates in conducting field flow testing of fire hydrant systems to ensure the adequacy of water supply for firefighting purposes. | Weekly<br>10%  |
| 5. | Prepares draft Fire and Building Code amendments; prepares reports detailing fire safety enhancements within the community.   | Weekly<br>5%   |
| 6. | Advices and consults with City and county governmental staff, fire protection districts regarding new building projects, public works, public utilities, structure rehabilitation, and/or other applicable issues.  | Monthly<br>5%  |
| 7. | Performs other duties of a similar nature or level.   | As<br>Required |

# **FRESNO, CALIFORNIA**

## **CLASS SPECIFICATION**

### **FIRE PREVENTION ENGINEER**

---

#### **Training and Experience** (positions in this class typically require):

- State of California Registration as a Fire Protection Engineer;
- OR
- State of California Registration as a civil, chemical, mechanical, electrical or structural engineer with 2 years professional paid full time experience in reviewing or designing fire sprinkler systems;
- OR
- Bachelor's Degree and two years full time paid experience with a fire prevention bureau which includes at least one year of fire sprinkler system plan review and licensed as a CSFM Plans Examiner ;
- OR
- An equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.

#### **Licensing Requirements** (positions in this class typically require):

- Basic Class C License

#### **Knowledge** (position requirements at entry):

Knowledge of:

- Fire sprinkler and hydrant system hydraulic principles;
- Acceptable alternate means and methods to insure fire and life safety;
- Mathematical concepts;
- Supervisory principles and practices;
- Applicable Federal, State and Local laws, codes, ordinances, policies, procedures, rules and regulations;
- Departmental policies, procedures and principles;
- City geography and water supply and distribution system;
- Fire safety systems used in residential, commercial, industrial and institutional facilities;
- Fire inspection methods and techniques;
- Fire sprinkler and alarm installation methods;
- Fire behavior;
- Recordkeeping principles and practices;
- Computers and applicable software and database systems.

# **FRESNO, CALIFORNIA**

## **CLASS SPECIFICATION**

### **FIRE PREVENTION ENGINEER**

---

#### **Skills** (position requirements at entry):

Skill in:

- Inspecting and approving field installations of fire protection systems
- Interpreting, applying and explaining applicable laws, codes, ordinances, policies, procedures, rules and regulations
- Utilizing research codes
- Using computers and applicable software applications
- Interpreting, applying and explaining applicable laws, codes, ordinances, policies, procedures, rules and regulations
- Prepare and proofread clear, concise, and comprehensive reports, records, and other written documents
- Reading and interpreting blueprints, schematics, and other technical drawings related to job duties
- Providing customer services
- Dealing tactfully with difficult people both telephonically and in person
- Preparing and performing mathematical calculations
- Monitoring and participating in the preparation and maintenance of operational reports, logs and records
- Applying researching methods
- Communication, interpersonal skills as applied to interaction with coworkers, supervisor, the general public, business, organizations, elected and appointed officials, media, etc. sufficient to exchange or convey information, give/receive work direction

#### **Physical Requirements:**

Positions in this class typically require: feeling, finger dexterity, grasping, hearing, repetitive motions, seeing, talking, bending, kneeling, lifting, reaching, standing, stooping, walking, balancing, climbing, crawling, crouching, pulling and pushing.

Medium Work: Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.

Incumbents may be subjected to environmental hazards, gasses, chemicals, oils and travel.

#### **Note:**

The above job specification is intended to represent only the key areas of responsibilities; specific position assignments will vary depending on the business needs of the department.

#### **Classification History:**

Draft prepared by Fox Lawson & Associates (LM)

Date: 12/2007

Reviewed by the City of Fresno

Date: 5/2008